

REMARKS

This is intended as a full and complete response to the Office Action dated August 24, 2005, having a shortened statutory period for response (extended three months) set to expire on February 24, 2006. Claims 1-20 are currently pending in the application. Claims 1, 4 and 20 are presently amended. Applicant submits that the amendments do not introduce new matter. Please reconsider the claims pending in the application for reasons discussed below.

Claim Informality

The Examiner has objected to claim 4 as it includes a minor informality, a period (.) at the end of line 5. The appropriate correction in claim 4 has been made.

Claim Rejections Under 35 U.S.C. § 102(b)

The Examiner rejected claims 1, 2, 4, 19 and 20 as being anticipated by *Kolls* (US Patent 6,895,310). *Kolls* discloses vehicle related wireless scientific instrumentation telematics. The system uses an in-vehicle device to gather data relative to a variety of conditions, including position data (GPS), weather, environmental data, traffic conditions, and road conditions. The position data is correlated with the other condition information to provide localized forecasting and related analysis. The position data is not used in itself to track the parking and movement behavior of a vehicle. In contrast, Applicant's invention deals with tracking movement and position of a vehicle for monitoring, measuring and usage metering. The position information is collected and processed as parking episodes and in an overall time-marked position-

log. For instance, independent claim 1 includes the limitations of (and similar limitations are included in claim 20):

- an apparatus mounted on or in the vehicle, comprising:
 - a receiver for receiving positioning signals;
 - a motion detector for determining parking episodes of the vehicle;
 - an RFID and/or DSRC element for determining entry and exit data based on movement of the vehicle into or out of gated areas;
 - a processor for forming a continuous, time-marked position-log from the positioning signals having regard to the parking episodes and the entry and exit data, the processor comprising a memory;
 - a storage element for storing position-logs; and
 - a two-way wireless telecommunication element, such as GPRS, to transmit position-logs;
- a central processing system, in communication with the apparatus, comprising:
 - a central telecommunication element to demand, receive and acknowledge receipt of position-logs and system information from the apparatus;
 - digital maps and databases for containing usage fees, premium rules, parking fees and schedules;
 - a central processor to further process position-logs, calculate user fees and generate invoices, maps and data feeds; and
 - a central storage element for storing the maps, databases, position-logs, and system information,

Additionally, *Kolls* does not teach, show or suggest a position-log containing optimized positioning signals processed to correct for multipath error. *Koll* does not mention "multipath error" as a consideration at all. This is not necessary to the

applications discussed in *Kolls* which would not require significant accuracy (1-2 meter) of the position information in difficult or obscured signal environments, such as built up areas. Furthermore, *Kolls* does not teach, show, or suggest the collection of position information when the vehicle is in either open or obscured line-of-sight from the signal source. As disclosed in Applicant's disclosure, it is a significant problem in urban (built-up) areas to obtain position data with a degree of accuracy due to multipath error and the effects of urban canyon and overhead barriers (see para. 0089). These problems are not acknowledged or addressed in *Kolls*.

Kolls does not disclose each and every one of the above limitations and accordingly does not anticipate claim 1 or claim 20. As the remainder of the claims depend directly or indirectly from claim 1, these claims are also believed to be novel over *Kolls*. The Applicant respectfully requests withdrawal of the § 102(b) rejection.

Claim Rejections Under 35 U.S.C. § 103(a)

The Examiner rejected claim 3 as being obvious over *Kolls* in view of *Breed* (US Patent No. 6,768,944). Claim 3 depends from allowable amended claim 1. As set forth above, *Kolls* fails to teach or suggest all the limitations in amended claims 1 and 20. For this reason, *Kolls* cannot be used to render claim 3 obvious. *Breed* does not disclose any element that *Kolls* lacks. *Breed* deals with vehicle control. While *Breed* does use GPS signals and does mention multipath error, this is mentioned by way of acknowledging that there is a multipath error problem in tracking vehicles using GPS, a problem which Applicant submits is addressed in part in the present invention. Furthermore, *Breed*, which deals with measuring certain properties of a moving vehicle,

does not disclose or suggest position-logs including parking episodes. The references taken separately or together do not teach or suggest the present invention. Applicant therefore submits that claim 3 is in condition for allowance and respectfully request withdrawal of the § 103(a) rejection.

The Examiner further rejected claims 5-18 as being obvious over *Kolls* in view of *Lightner et al.* (US Patent No. 6,732,031). As set forth above, *Kolls* fails to teach or suggest all the limitations in amended claims 1 and 20. For this reason, *Kolls* cannot be used to render claims 5-18 obvious. *Lightner* does not disclose any element that *Kolls* lacks. *Lightner*, which deals with vehicle diagnostics, does not teach or suggest using position information which is optimized to correct for multipath error. Multipath error is not mentioned in either *Kolls* or *Lightner* at all. The references, taken separately or together, do not teach or suggest the present invention.

For all these reasons, the Applicant respectfully requests withdrawal of the § 103(a) rejections.

Conclusion

In conclusion, the references cited by the Examiner, alone or in combination, do not teach, show, or suggest the invention as claimed.

The prior art made of record is noted. However, it is believed that the secondary references are no more pertinent to the Applicant's disclosure than the primary references cited in the office action. Therefore, it is believed that a detailed discussion of the secondary references is not necessary for a full and complete response to this office action. Having addressed all issues set out in the office action, Applicant

respectfully submits that the claims are in condition for allowance and respectfully request that the claims be allowed.

Respectfully submitted,



Douglas N. Deeth
Registration No. 28,773
DEETH WILLIAMS WALL LLP
150 York Street
Suite 400
Toronto, Ontario, Canada
M5H 3S5
Telephone: (416) 941-9440
Facsimile: (416) 941-9443
Attorney for Applicants